National Weather Service Aviation Services Implementation Plan

Background

Consistent with the FAA's Air Traffic Organization's (ATO) philosophy to review, upgrade, and create efficiencies in various functions, in January 2006 the National Weather Service (NWS) Corporate Board agreed to prototype a more effective and efficient forecast process to support Air Route Traffic Control Center (ARTCC) operations. Prototyping activities are described below.

What is the purpose of the NWS Prototyping activities?

There are two objectives of this prototype. (1) Demonstrate the capability to perform collaboration between the Center Weather Service Unit (CWSU) and the Weather Forecast Office (WFO) to produce new forecast and decision aid products that translate weather impact on en-route and terminal air operations and that provide common situational awareness to all prototype participants; (2) Demonstrate the capability of the WFO to remotely support ARTCC weather information requirements when the CWSU is unavailable.

Where will the Prototype take place?

Prototyping activities will be conducted from the Sterling WFO and the CWSU/Leesburg ARTCC.

How will the Prototype be set up?

The NWS will provide all necessary equipment (client workstation for the WFO, CWSU, and ARTCC Traffic Management Unit (TMU) and communication paths for the prototype, to include a telephone "hot-line" for TMU immediate access to the Sterling WFO) to support collaboration between the Sterling WFO and CWSU/Leesburg ARTCC.

WFO Sterling will be the location for the remote operation that will support CWSU Leesburg during the prototype. The remote operation will work 0530-2130 Local Time five days per week. The remote operation will collaborate with CWSU Leesburg to assist with the production of new standard weather briefings, forecast products, and decision aids for TMU use. The CWSU/Leesburg ARTCC meteorologists will continue to be the final authority for weather service products to ARTCC personnel. Two shifts during the five day week, the remote operation will provide direct support to the TMU. During these two shifts, the CWSU/Leesburg ARTCC meteorologists will remain intact and staffed in their current state to provide a "safety net."

Training will be provided to all operational staff on the development and dissemination of the new products.

When will prototyping activities take place?

The prototype operations will begin July 2006 and will end on September 2006.

How will the prototype impact day to day operation at the ARTCC?

No degradation of information provided by NWS services is expected during this prototype; it is designed to be "seamless" and user friendly for all FAA staff.

How will the prototype impact operations at the Sterling WFO?

An additional computer workstation (including AWIPS and a FX-Connect workstation) will be added to the Sterling WFO operations area. During times of prototype operations, the meteorologist staffing the remote operations desk will collaborate with the WFO's operational staff. In addition to assisting the CWSU, the remote operations desk will carry out the duties of the WFO Sterling short term forecaster but will not transmit those products. The duties of the remote operations desk will be performed by meteorologists other than the WFO Sterling on-duty forecasters.

Evaluation

The evaluation of the new products will include feedback from ARTCC Traffic Management Unit personnel and an evaluation of collaboration tools will include feedback from CWSU and WFO forecasters NWSEO will have an opportunity to participate in the evaluation through their representative on the Aviation Initiative Team.